EXHIBIT A

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH CAROLINA

INTERNATIONAL BROTHERHOOD	Case No. 3:19-cv-3304
OF ELECTRICAL WORKERS LOCAL) 98 PENSION FUND on behalf of itself and all others similarly situated,	CLASS ACTION
Plaintiffs,	
vs.	
DELOITTE & TOUCHE, LLP; DELOITTE LLP,)))
Defendants.))
	1

EXPERT REPORT OF MATTHEW D. CAIN, PHD April 30, 2021

Table of Contents

1.	Qualifications2		
II.	Introduction and Summary of Opinions		
III.	Case	Background	5
	A.	Overview of the Company and Allegations	5
	B.	Bases for Opinions on Market Efficiency	7
IV.	Eval	Evaluation of Market Efficiency Factors to SCANA Common Stock	
	A.	Cammer Factor 1: Average Weekly Trading Volume	11
	B.	Cammer Factor 2: Analyst Coverage	13
	C.	Cammer Factor 3: Market Makers	15
	D.	Cammer Factor 4: SEC Form S-3 Filing Eligibility	17
	E.	Cammer Factor 5: Cause and Effect Relationship Between Company Information and Stock Prices	19
	F.	Additional Factor 1: Market Capitalization	25
	G.	Additional Factor 2: Bid-Ask Spread	26
	Н.	Additional Factor 3: Public Float	28
	I.	Additional Factor 4: Institutional Ownership	28
	J.	Additional Factor 5: Autocorrelation	29
	K.	Additional Factor 6: Options Trading	30
V.	Abili	ity to Calculate Damages on a Class-Wide Basis	31
VI.	Conclusion		33
Appe	endix A	A	35
Appe	endix I	B	36
Exhi	bits		38

I. Qualifications

- 1. I am a Ph.D. in Finance, and a Senior Fellow at the Berkeley Center for Law and Business and a Senior Visiting Scholar at Berkeley Law School, University of California. I teach courses, deliver guest lectures, participate in academic seminars, and conduct research in various topic areas related to finance, economics, accounting, law, and business. My research focuses on a variety of topics, including empirical corporate finance, corporate governance, board independence, mergers and acquisitions, hostile takeovers, shareholder lawsuits, negotiations, financial contracting, disclosures of financial information, and shareholder activism. I previously held a fellowship with the Harvard Law School Program on Corporate Governance, where I participated in research seminars and related activities.
- 2. I worked at the U.S. Securities and Exchange Commission ("SEC") between 2014 and 2018 as a Financial Economist. During that time, I provided economic analysis and expert witness testimony on behalf of the SEC in a wide variety of enforcement investigations, settlement negotiations and litigation, including cases alleging accounting fraud, revenue recognition practices, and disclosure violations. I also served as an advisor to SEC Commissioner Robert J. Jackson, Jr., during which time I assisted with enforcement oversight and policymaking decisions, research, and speechwriting on a wide range of topics, including securities violations, revenue recognition practices, and corporate governance issues.

 Additionally, while employed at the SEC as a Financial Economist, I continued to work on and publish academic research, for which I was awarded the Chairman's Award for Economic Research.
- 3. Prior to working at the SEC, I was an Assistant Professor of Finance at the University of Notre Dame. I taught courses in Mergers and Acquisitions to both undergraduate

and graduate students, and I also conducted empirical research on various finance, legal, accounting, and economic topics. I have been engaged in academic research for over a decade and continue to publish in law reviews and peer-reviewed academic journals across these disciplines.

- 4. Prior to working at Notre Dame, I received a Ph.D. in Finance from Purdue University in 2007. Prior to those studies, I worked as an analyst in Debt Capital Markets at National City Bank, where I assisted companies in raising syndicated loans and private placements of debt and equity for use in funding mergers, acquisitions, and other general corporate purposes. I received a B.S. in Finance from Grove City College in 2001.
- 5. In addition to teaching at UC Berkeley, Notre Dame and Purdue, I have delivered guest lectures to undergraduate and graduate students at Vanderbilt University, Arizona State University, Cornell University, and UC Berkeley School of Law. I have also presented my academic research at numerous academic, governmental, and professional institutions, as listed in my curriculum vitae, which is attached as **Appendix A**.
- 6. I have published research in leading peer-reviewed finance, accounting, law, and economics journals, including the *Journal of Financial Economics, Journal of Law and Economics, Journal of Accounting and Economics, Journal of Empirical Legal Studies, and Journal of Financial and Quantitative Analysis*. My curriculum vitae, attached as **Appendix A**, further details my publications and previous testimony.

II. Introduction and Summary of Opinions

7. I have been asked by the Court-appointed Lead Plaintiff in this matter to determine whether the market for SCANA Corporation ("SCANA" or the "Company") common stock ("Common Stock") was efficient during the period February 26, 2016 – December 20,

2017, inclusive (the "Class Period"). In addition, I have been asked to opine on whether the calculation of damages on a class-wide basis in this matter is subject to a common methodology.

- 8. The materials I have considered in forming my opinions are summarized in **Appendix B**. I am being compensated at an hourly rate of \$750 per hour for my work on this matter. I am being assisted by staff at Global Economics Group, who performed work under my direction at rates between \$200 and \$450 per hour. My compensation is in no way contingent on the outcome of this case. My work is ongoing and I reserve the right to update my analyses and opinions based upon new information, discovery, expert reports, or other information that comes to my attention.
- 9. Based on my analysis to date and the evaluation of the factors described throughout this report, I have formed the opinion that the market for shares of SCANA's Common Stock was efficient during the Class Period.
- 10. I have also formed the opinion that damages in this matter can be calculated on a class-wide basis subject to a common methodology.
- 11. The remainder of my report is organized as follows: Section III describes the case background and the bases for the reliance requirement and the "fraud on the market" theory relating to market efficiency. Section IV presents my analyses of the market efficiency factors during the Class Period. Section V addresses how damages can be calculated on a class-wide basis subject to a common methodology. Section VI contains my conclusions.

¹ I understand the Lead Plaintiff to be International Brotherhood of Electrical Workers Local 98 Pension Fund, and Defendants to comprise SCANA's auditor during the Class Period, Deloitte & Touche, LLP and Deloitte LLP, collectively the "Defendants" or "Deloitte." Source: Consolidated Complaint, *International Brotherhood of Electrical Workers Local 98 Pension Fund on Behalf of Itself and All Others Similarly Situated vs. Deloitte & Touche, LLP and Deloitte LLP*, No. 3:19-cv-3304 (the "Complaint").

3:19-cv-03304-MBS Date Filed 04/30/21 Entry Number 72-1 Page 7 of 54

III. Case Background

A. Overview of the Company and Allegations

12. Deloitte, LLP manages U.S. subsidiaries that offer tax, consulting, and financial advisory services, and is the largest professional service organization in the United States.² Deloitte & Touche, LLP is the accounting arm of Deloitte, LLP, offering audit and enterprise risk services to clients.³ SCANA was an energy-based holding company engaged, through subsidiaries, in electric and natural gas utility operations and other energy-related businesses. SCANA's principal and wholly owned subsidiary, South Carolina Electric & Gas ("SCE&G"), was a regulated public utility engaged in the generation, transmission, distribution and sale of electricity primarily in South Carolina.⁴ Deloitte was SCANA's external auditor for over 70 years, and subsequently was responsible for understanding SCANA's business, identifying and responding to risks of material misstatements, and acquiring sufficient, appropriate audit evidence so it could assure that SCANA's financial statements were in accordance with Generally Accepted Accounting Principles ("GAAP"). 5 It is alleged that throughout the Class Period, Deloitte repeatedly violated its professional responsibilities and deceived investors about SCANA's accounting for, and expected completion of, a multi-billion dollar nuclear energy expansion project of the Virgil C. Summer Nuclear Station in Fairfield County, South Carolina (the "Nuclear Project"). Specifically, it is alleged that Deloitte misled investors by giving "unqualified, 'clean' audit reports" covering SCANA's internal controls and financial statements. Allegedly, this deceived investors into believing that SCANA would complete its Nuclear Project in time to obtain \$1.4 billion in nuclear tax credits, despite Deloitte having

² Complaint ¶22

³ Complaint ¶¶21-22

⁴ Complaint ¶23

⁵ Complaint ¶3

"voluminous evidence that SCANA could not possibly achieve this goal"⁶, and that "numerous reports and documents were available to any reasonably diligent auditor demonstrating that SCANA's financial statements were not in accordance with GAAP, despite Deloitte's 'clean' audit reports to the contrary."⁷

13. The Complaint alleges that the relevant truth concerning the Nuclear Project was revealed through a series of partial corrective disclosures from late December 2016 through December 20, 2017. These disclosures included news about cost overruns, missed deadlines, financial distress, and bankruptcy of SCANA's lead contractor on the nuclear project, Westinghouse Electric Company LLC, and its parent company, Toshiba Corporation. 9 The disclosures further included a press release from SCANA on July 31, 2017, announcing its intentions to: a) abandon the nuclear project, and b) file a petition with the South Carolina Public Service Commission ("PSC") seeking approval of its abandonment plan. ¹⁰ Further disclosures and materializations of the risks followed, including numerous updates, press releases, news coverage, investigations and lawsuits, public testimony, and regulatory updates, during the summer and fall of 2017. These disclosures culminated in a press release by the PSC on December 20, 2017 (after market hours) and related news coverage that indicated the need for an inspection and hearing to determine the reasonableness of SCE&G's retail electric rates and whether SCANA should refund its customers for the roughly \$1.8 billion it had collected from them to fund the Nuclear Project. 11 An investigation and Complaint by the SEC later concluded that SCANA's Class Period statements regarding the status and ultimate failure of the nuclear

⁶ Complaint ¶1

⁷ Complaint ¶15

⁸ Complaint ¶312

⁹ Complaint ¶¶4, 14, 28

¹⁰ Complaint ¶344

¹¹ Complaint ¶404

project violated the securities laws. 12 As a result of Deloitte's involvement in the fraud, investors allegedly purchased SCANA Common Stock at artificially inflated prices during the Class Period.

14. **Exhibit 1** graphs the closing stock price and trading volume for SCANA's Common Stock shares throughout the Class Period.

B. Bases for Opinions on Market Efficiency

15. I understand that Plaintiff asserts the "fraud-on-the-market" theory, which posits that shareholders rely on the alleged misrepresentations or omissions made by defendants through their effect on stock prices in an open and well-developed market. If a market is efficient, meaning that widely available public information is quickly incorporated into stock prices, then all purchasers of the stock are induced into reliance on any misrepresentations or omissions because those statements or omissions have distorted the value of each class member's purchase price. The fraud-on-the-market theory of reliance has been addressed by numerous courts over the years in relation to Section 10(b) claims, and was adopted by the U.S. Supreme Court in its *Basic* decision:

> [I]n an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business.... Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements.... The causal connection between the defendants' fraud and the plaintiffs' purchase of stock in such a case is no less significant than in a case of direct reliance on misrepresentations. 13

16. This theory was also reaffirmed by the Supreme Court in *Halliburton II*:

More than 25 years ago, we held that plaintiffs could satisfy the reliance element of the Rule 10b-5 cause of action by invoking a presumption that a public, material misrepresentation will distort

¹² Complaint ¶433

¹³ Basic Inc. v. Levinson, 485 U.S. 224, 241-42 (1988).

the price of stock traded in an efficient market, and that anyone who purchases the stock at the market price may be considered to have done so in reliance on the misrepresentation. We adhere to that decision and decline to modify the prerequisites for invoking the presumption of reliance.¹⁴

- 17. As these cases indicate, stock prices quickly incorporate the valuation effects of public statements in an open, developed, and efficient market. In finance, "semi-strong-form" market efficiency refers to a market in which publicly available information is quickly reflected in a security's market price. Thus, if a company omits important information or provides misleading information to shareholders, the stock price will become distorted and either inflated or deflated relative to the price at which the stock would trade but-for the misleading or omitted information. Thus, in an efficient market, purchasers implicitly rely on a company's misrepresentations or omissions because they are impounded into the stock price at which trades are made.
- 18. Courts and practitioners have argued that markets with continuous public reporting of stock prices and trading volume, such as the New York Stock Exchange ("NYSE") and NASDAQ, should be granted a presumption of efficiency for virtually all securities traded on them. ¹⁵ The continuous reporting of trading statistics, significant trading volumes, rapid information dissemination, and other exchange rules practically guarantee a liquid market for securities traded on these exchanges. The fact that SCANA's Common Stock traded in such a well-developed market (under the trading symbol "SCG" on the NYSE) leads to a strong presumption of market efficiency.

¹⁴ Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 283-84 (2014).

¹⁵ See *Cammer v. Bloom*, 711 F. Supp. 1264, 1292 (D.N.J. 1989) ("*Cammer*"), citing Bromberg & Lowenfels: "We think that, at a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System."

19. Numerous academics have studied the pricing behavior of stock markets and some have purported to identify anomalies that call into question the efficiency of markets. However, academics have generally concluded that these anomalies represent random patterns in the data, are often not scientifically reproducible or robust to different statistical modeling choices, and/or are not persistent and have been quickly eliminated by arbitrage trading. For example, Nobel prize winner Eugene Fama summarizes market efficiency as follows:

The recent finance literature seems to produce many long-term return anomalies. Subjected to scrutiny, however, the evidence does not suggest that market efficiency should be abandoned. Consistent with the market efficiency hypothesis that the anomalies are chance results, apparent overreaction of stock prices to information is about as common as underreaction. And post-event continuation of pre-event abnormal returns is about as frequent as post-event reversal. Most important, the long-term return anomalies are fragile. They tend to disappear with reasonable changes in the way they are measured. ¹⁶

Similarly, Kewei Hou, Chen Xue, and Lu Zhang concluded that "[m]ost anomalies fail to replicate, falling short of the currently acceptable standards for empirical finance...In all, capital markets are more efficient than previously recognized." ¹⁷

20. Academic research thus provides a strong presumption for market efficiency. I understand that courts have also developed various tests that attempt to weigh in favor of or against the presumption of market efficiency. None of these tests are individually determinative of market efficiency, but when viewed as a whole they can be informative in supporting or rebutting a presumption of market efficiency in relation to the reliance element of the fraud-on-

¹⁶ Eugene F. Fama, 1998, Market Efficiency, Long-Term Returns, and Behavioral Finance, *Journal of Financial Economics* 49, at 304.

¹⁷ Kewei Hou, Chen Xue, and Lu Zhang, 2020, Replicating Anomalies, *Review of Financial Studies* 33, at 2071.

the-market theory. These factors include what courts have referred to as the Cammer and $Krogman^{18}$ factors, as well as other additional metrics.

- 21. In the following section, I discuss these factors and evaluate them in relation to SCANA Common Stock. In doing so, I compare the various factors for SCANA's Common Stock against: (1) benchmarks established by courts; (2) scientific tests of statistical significance; and/or (3) findings from peer-reviewed published academic research.
- 22. One academic study that I use for comparison purposes was published by Simona Mola, P. Raghavendra Rau, and Ajay Khorana, which I refer to as the "MRK Study." In this study, these authors examined two samples of firms. One sample included companies that lost all analyst coverage (the "MRK Sample" firms); these firms had smaller market capitalizations, less trading volume, larger bid-ask spreads, and lower institutional ownership relative to analyst-covered firms, both before and after losing analyst coverage. The second sample included the analyst-covered firms (the "MRK Covered" firms), and the differences between the two samples in average and median market capitalization, trading volume, bid-ask spread, and institutional ownership were all statistically significant at the 99% level. 20 The authors of the MRK Study summarize their findings as follows:

This paper examines the value of sell-side analysts to covered firms by documenting the effects on firm performance and investor interest after a complete loss of analyst coverage for periods of at least one year. We find that analyst coverage adds value to a firm both because it reduces information asymmetries about the firm's future performance and because it maintains investor recognition for that firm's stock...Firms that lose all analyst coverage continue to suffer a significant deterioration in bid-ask spreads, trading

¹⁸ Krogman v. Sterritt, 202 F.R.D. 467 (N.D. Tex. 2001). ("Krogman").

¹⁹ Simona Mola, P. Raghavendra Rau, and Ajay Khorana, 2013, Is There Life After the Complete Loss of Analyst Coverage?, *Accounting Review* 88, at 667-705. ("MRK Study").

²⁰ MRK Study at 678, 681-682.

- volumes, and institutional presence but do not show a significant difference in subsequent performance relative to covered peers.²¹
- 23. The authors describe these variables as reflective of investor interest: after losing analyst coverage, "investor interest characteristics, such as market capitalization, trading volume, bid-ask spread, institutional holdings, and number of institutions, significantly worsen relative to [analyst-]covered peers." Therefore, I interpret the sample of MRK Covered firms as those eliciting high investor interest and reflecting the common indicia of firms operating in efficient markets. I then compare several of SCANA's market efficiency factors to the samples of firms in the MRK Study to assess whether SCANA's characteristics are consistent with firms operating in efficient markets.
- 24. The following section presents my analyses and findings from the evaluation of various market efficiency factors for SCANA Common Stock during the Class Period.

IV. Evaluation of Market Efficiency Factors for SCANA Common Stock

A. Cammer Factor 1: Average Weekly Trading Volume

25. Trading volume refers to the number of shares of a security transacted between market participants. The greater the amount of buying and selling activity of a security, the more likely it is that new information will be quickly incorporated into the price of that security. Thus, trading volume is an indicator of how developed, liquid, and efficient the market is for a given stock. Thomas and Cotter have stated that "[t]rading volume was also considered as an eligibility standard because it affects information dissemination to the market, and was an important criterion for investment analysts in deciding which stocks to follow."²³

²¹ MRK Study at 667.

²² MRK Study at 681 (footnotes omitted).

²³ Randall S. Thomas and James F. Cotter, 2000, Measuring Securities Market Efficiency in the Regulatory Setting, *Law and Contemporary Problems* 63, at 108.

26. Stock trading volume refers to the extent to which a firm's equity is traded among investors during a given time period. The first *Cammer* factor for stock trading volume has been defined by the *Cammer* court using average weekly trading volume relative to shares outstanding. In setting a threshold of trading volume for the presumption of market efficiency, the court stated:

Turnover measured by average weekly trading of 2% or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; 1% would justify a substantial presumption.²⁴

- 27. **Exhibit 2** graphs SCANA's Common Stock weekly trading volume as a fraction of shares outstanding throughout the Class Period.²⁵ The average weekly trading volume was 4.07% of SCANA's common shares outstanding over the Class Period. This level of trading volume significantly exceeds both the 1% and 2% thresholds established by the *Cammer* court. As a result, SCANA's level of stock trading volume throughout the Class Period supports the conclusion that SCANA's Common Stock traded in an efficient market throughout the Class Period.
- 28. I also note that the average weekly trading volume of SCANA's Common Stock over the Class Period was 5.81 million shares. According to the authors in the MRK Study, the median *annual* trading volume for the MRK Sample firms was 1.75 million shares while the median for the MRK Covered firms was 11.19 million shares *annually*. ²⁶ Based on SCANA's average *weekly* trading volume of 5.81 million shares during the Class Period, SCANA's trading volume greatly exceeds the median MRK Sample firm's *annual* level. Moreover, the sum of two

²⁴ Cammer, 711 F. Supp. at 1293 (citing Bromberg & Lowenfels).

²⁵ In this analysis, a "trading week" consists of five consecutive trading days, which may not follow the calendar week.

²⁶ MRK Study at 678 (Table 3).

average weeks of SCANA trading volume would exceed the median MRK Covered firm's annual level.²⁷ This further supports the conclusion that SCANA's Common Stock traded in an efficient market throughout the Class Period.

B. Cammer Factor 2: Analyst Coverage

29. An analyst is someone, usually working for a financial institution such as a brokerage, bank, or investment bank, who studies financial information and trends for a specific company or an industry. Analysts typically publish reports in which they may assess recent company business developments, review historical financial performance and provide forecasts of future operating performance, or make investment recommendations, such as whether investors should buy, sell, or hold the company's stock. The content of analyst reports includes information that the analyst believes is important for investors. Analyst coverage can be indicative of market efficiency since research analysts ensure that new important company-specific information is disseminated to investors and thus impounded into stock prices quickly and efficiently. The *Cammer* court similarly stated:

[I]t would be persuasive to allege a significant number of securities analysts followed and reported on a company's stock during the class period. The existence of such analysts would imply, for example, the [auditor] reports were closely reviewed by investment professionals, who would in turn make buy/sell recommendations to client investors.²⁸

30. In **Exhibit 3** I report the analyst coverage of SCANA over the Class Period. I identified a total of 186 reports issued by analysts at 13 separate firms.²⁹ These reports included

²⁷ SCANA's average *weekly* trading volume over the Class Period of 5.81 million shares multiplied by two equals 11.62 million shares.

²⁸ *Cammer*, 711 F. Supp. at 1286.

²⁹ I obtained analyst reports covering SCANA from Investext. These statistics represent a lower bound of the analyst coverage of SCANA because many analyst reports are provided directly to investors but are not captured by third-party data vendors such as Investext.

research issued by large, established, and reputable firms such as Morningstar, Wells Fargo,
Morgan Stanley, UBS, and Barclays. This is a significant degree of analyst coverage which
served to disseminate important new publicly-available information to investors, including
company news, financial performance, forecasts, and analyst commentary and recommendations.

- 31. This degree of analyst coverage compares favorably to that documented by academic research. For example, the MRK Study noted that 19% of U.S. firms covered by I/B/E/S received no analyst coverage in a given year. Oharles M.C. Lee and Eric So documented that on average, firms were covered by between 0.765 and 7.614 analysts when ranking firms into deciles by the total number of analyst forecasts issued. In other words, many firms within the category of the least amount of analyst coverage in their sample were covered by only one or two analysts. SCANA's analyst coverage is consistent with the MRK Covered firms which elicited high investor interest. The significant analyst coverage of SCANA, quantified by the number of analyst firms providing coverage as well as the volume of analyst reports generated during the Class Period, supports the conclusion that SCANA's Common Stock traded in an efficient market throughout the Class Period.
- 32. In addition to the analyst coverage documented above, investors could access information about SCANA from a variety of other sources. ³² For example, I conducted a search of press and news articles about SCANA using Factiva, a well-known provider of access to business news across a comprehensive set of publications. Factiva coverage includes Dow Jones Newswires, PR Newswires, The Wall Street Journal, Reuters, MarketWatch, Investor's Business

³¹ Charles M.C. Lee and Eric C. So, 2017, Uncovering Expected Returns: Information in Analyst Coverage Proxies, *Journal of Financial Economics* 124, at 336 (see Table 1, Panel B – "COV").

³⁰ MRK Study at 668.

³² Investors can also receive information from online research forums, such as SeekingAlpha, which offers both free and subscription-based research reports. For example, there were nine analyst reports published during the Class Period on SeekingAlpha.

Daily, and numerous other outlets. This search produced over 3,700 articles throughout the Class Period. ³³ Moreover, SCANA produced numerous filings containing Company information which were immediately disseminated to the public through the SEC's online database, EDGAR, during the Class Period. Individual and institutional investors thus had access to publicly available information about SCANA from a variety of sources during the Class Period. As a result, the analyst coverage, number of analyst research reports produced, and substantial public dissemination of news, SEC filings, and information about SCANA supports the conclusion that SCANA Common Stock traded in a well-developed and informationally efficient market during the Class Period.

C. Cammer Factor 3: Market Makers

33. The third *Cammer* factor relates to securities trading outside of major exchanges, in over-the-counter markets without continuous reporting of trading volume. This factor examines market makers, which are firms that facilitate buying and selling – order flow – in a company's stock during trading hours.³⁴ Market makers can facilitate market efficiency in an over-the-counter market because they are:

... [P]resumably knowledgeable about the issuing company and the stocks' supply and demand conditions (i.e., the "order flow"). Therefore, it is believed the larger the number of market makers in a given security, the more information is available about it and the quicker its dissemination in the price.³⁵

³³ The articles were identified through two Factiva searches: one using SCANA's company tag over all available sources, and a second using the word "SCANA," but excluding articles generated by SCANA's company tag, and limiting to Major News and Business Sources. I excluded articles covering Scana Industrier or its parent Incus Investors, which are unrelated to SCANA Corporation. I then performed an additional check for articles returned by both searches and removed these duplicates.

³⁴ "A 'market maker' is a firm that stands ready to buy or sell a stock at publicly quoted prices." *See* https://www.investor.gov/introduction-investing/investing-basics/glossary/market-makers.

³⁵ Brad M. Barber, Paul A. Griffin, and Baruch Lev, 1994, The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency, *Journal of Corporate Law* 19, at 291.

34. In evaluating market efficiency by looking at market makers, the *Cammer* court held:

For over the counter markets without volume reporting, the number of market makers is probably the best single criterion. Ten market makers for a security would justify a substantial presumption that the market for the security is an efficient one; five market makers would justify a more modest presumption. ³⁶

35. The court thus stated that market makers can be an important indicator of market efficiency for stock trading in an over-the-counter market without continuous trading volume reporting. SCANA had at least 116 market makers over the Class Period. The addition, SCANA's Common Stock traded on the New York Stock Exchange ("NYSE") throughout the Class Period. This type of large, national exchange reports volume, prices, bid-ask spreads, and other trading details which ensure that it remains well-developed, liquid, and efficient. The *Cammer* court thus stated:

We think that, at a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System. ³⁸

36. I understand that courts view large, established stock exchanges with designated market makers (such as the NYSE³⁹) as being informationally efficient. ⁴⁰ Moreover, I

³⁶ Cammer, 711 F. Supp. at 1293.

³⁷ Bloomberg "RANK" function.

³⁸ *Cammer*, 711 F. Supp. at 1292.

³⁹ The NYSE Market Model, *NYSE*, available at: https://www.nyse.com/market-model: "The cornerstone of the NYSE market model is the Designated Market Maker (DMM). DMMs have obligations to maintain fair and orderly markets for their assigned securities. They operate both manually and electronically to facilitate price discovery during market opens, closes and during periods of trading imbalances or instability. This high-touch approach is crucial for offering the best prices, dampening volatility, adding liquidity and enhancing value. DMMs apply their market experience and judgment of dynamic trading conditions, macroeconomic news and industry-specific intelligence, to inform their decisions. A valuable resource for our listed-company community, DMMs offer insights, while making capital commitments, maintaining market integrity, and supporting price discovery."

⁴⁰ See, e.g., Vinh Nguyen v. Radient Pharmaceuticals Corporation, 287 F.R.D. 563, 572-73 (C.D.Ca. 2012); "One defendant in Cammer contended that only stocks trading on the New York or American stock exchanges should be

understand that courts view institutional investors as potentially providing similar benefits to market makers by supplying trading liquidity and informationally-efficient and informed trading. Academic research has similarly found that institutional investors can facilitate trading liquidity. As I discuss further in Section IV.I below, SCANA's Common Stock was widely held by institutional investors throughout the Class Period. 42

37. In sum, SCANA easily satisfies the intent of this *Cammer* factor by virtue of the Common Stock's highly liquid and well-developed trading venues, the presence of market makers, and the widespread holdings by sophisticated institutional investors, further supporting the efficiency of the market for SCANA Common Stock during the Class Period.

D. Cammer Factor 4: SEC Form S-3 Filing Eligibility

38. The fourth *Cammer* factor cited by the court is SEC Form S-3 filing eligibility:

[I]t would be helpful to allege the Company was entitled to file an S-3 Registration Statement in connection with public offerings or, if ineligible, such ineligibility was only because of timing factors rather than because the minimum stock requirements set forth in the instructions to Form S-3 were not met. Again, it is the number

eligible for the presumption of reliance provided by the theory of fraud on the market. In rejecting that broad distinction, the court noted that "the inquiry in an individual case remains the development of the market for that stock, and not the location where the stock trades." "But the trading location is still important, in one key sense: In an over the counter market, the number of market makers may be a particularly important measure of market efficiency...By contrast, Radient traded on the NYSE Amex during the Class Period which, as Plaintiffs' expert notes, means that it was assigned what that market now calls a Designated Market Maker" (citations omitted). See also: *Hayes v. MagnaChip Semiconductor Corp.*, Case No. 14-cv-01160-JST (N.D.Ca. 2016), at 6: "The Court agrees that both the presence of a designated market maker and so many market makers in other trading venues weigh in favor of a finding of market efficiency."

⁴¹ See, e.g., In re Countrywide Financial Corp. Securities Litigation, 273 F.R.D. 586, 614 (C.D.Ca. 2009) ("Similarly, the presence of large institutional investors may be similar to the presence of market-makers and arbitrageurs: large investors, with more money at stake, may be more likely to inform themselves well before trading.") (citations omitted); In re HealthSouth Corp. Securities Litigation, 257 F.R.D. 260, 281 (N.D. Al. 2009) ("[T]he majority of HealthSouth's shares were owned by large sophisticated institutions. These facts further demonstrate that HealthSouth's stock traded in an efficient market.")

⁴² SCANA Common Stock was held by at least 991 institutional investors at some point during the Class Period (see Exhibit 10). Institutional ownership fluctuated on a quarterly basis throughout the Class Period, from a minimum of 66% of shares outstanding on March 31, 2016 to a maximum of 70% of shares outstanding on March 31, 2017, according to data from S&P Capital IQ and SCANA's SEC Filings. These figures represent a lower-bound estimate of institutional holdings as some institutions may not be reflected in S&P Capital IQ's coverage.

- of shares traded and value of shares outstanding that involve the facts which imply efficiency. ⁴³
- 39. Form S-3 filing eligibility allows companies to file a shortened form with the SEC in order to raise capital, by providing references to previous SEC filings as opposed to repeating a large quantity of information. This eligibility includes the following requirements: the registrant has a class of securities subject to the Securities Exchange Act of 1934 ("Exchange Act"), the registrant has filed all necessary filings with the SEC in a timely manner for the past 12 months, and the registrant has not failed to pay any dividend or sinking fund installment on preferred stock or defaulted on any material debts or leases. ⁴⁴ The logic and intuition behind this factor as discussed by the *Cammer* court is that a company which makes timely financial filings with regulators implies that investors have ready and ample access to publicly available information about the issuer.
- 40. Not only was SCANA eligible to file Forms S-3 throughout the Class Period, but it did so during the Class Period. Specifically, on September 26, 2016, SCANA filed a Form S-3ASR with the SEC. In addition, SCANA filed a Form S-3ASR with the SEC shortly before and after the Class Period, on August 27, 2015, and March 16, 2018, respectively. A Form S-3ASR is a version of Form S-3 for "a well-known seasoned issuer." Finally, SCANA made all required filings with the SEC on a timely manner during the Class Period. As a result, this factor supports the efficiency of the market for SCANA Common Stock during the Class Period.

⁴³ Cammer, 711 F. Supp. at 1287.

⁴⁴ https://www.sec.gov/files/forms-3.pdf.

⁴⁵ https://www.sec.gov/Archives/edgar/data/754737/000075473716000125/0000754737-16-000125-index.htm; https://www.sec.gov/Archives/edgar/data/754737/000075473715000062/0000754737-15-000062-index.htm; https://www.sec.gov/Archives/edgar/data/754737/000075473718000124/0000754737-18-000124-index.htm.

E. Cammer Factor 5: Cause and Effect Relationship Between Company Information and Stock Prices

- 41. The fifth *Cammer* factor relates to whether a company's stock prices quickly respond to and incorporate new value-relevant information. The *Cammer* court held:
 - ... [O]ne of the most convincing ways to demonstrate [market] efficiency would be to illustrate, over time, a cause and effect relationship between company disclosures and resulting movements in stock price.⁴⁷
- 42. The underlying logic of this test is that in an informationally efficient market, a company's stock price should rapidly incorporate the value of new company-specific information. If, over the course of multiple events, new information becomes public and this information would clearly indicate a significant increase or decrease in firm value, but the company's stock price does not change, this would indicate potential market inefficiency. Alternatively, if the company's stock price does move more on days in which new information was released, this would support a finding of market efficiency. It is important to note that one would only expect to observe this pattern around the release of unexpected and unanticipated value-relevant company news. If investors had already anticipated the value impact of this information, then one would not expect to observe a price reaction to the publication of such information in an efficient market.
- 43. To assess the extent of a "cause and effect relationship between company disclosures and resulting movements in stock price," I analyzed SCANA's quarterly and annual earnings announcements during the Class Period. Earnings announcements represent a potential opportunity for the public release of new value-relevant company information to investors. This information can include historical financial and operating performance, forecasts and projections

⁴⁷ Cammer, 711 F. Supp. at 1291.

of anticipated future performance of the company, executive statements made during earnings conference calls, analyst reports, other firm-specific news, and some combination and mix of this information. One would not expect every earnings announcement to cause a significant stock price movement for a company since investors and analysts may anticipate the reported performance, or because the information may contain a mix of both positive and negative information. The mix of unanticipated performance, earnings surprises (beyond the earnings forecasted by analysts and investors), forward guidance, executive statements, analyst interpretations of this information, and other company-specific news can cause company stock prices to move in an efficient market. I also considered the fact that other types of news or information could be more or less relevant for a given company during certain time periods.

- 44. I compared the stock returns and trading volume of SCANA's Common Stock on trading days following Company earnings announcements versus those metrics on trading days that contained the least news during the Class Period (the "Least News Trading Days"). ⁴⁸ The Least News Trading Days provide a benchmark measurement of days in which relatively less company-specific information was provided to the market. If SCANA's stock prices tend to move more significantly following earnings announcements than on the Least News Trading Days, this would support a conclusion of market efficiency.
- 45. In order to study the stock price movements for SCANA on different trading days, I performed an event study. 49 A generally accepted method for performing an event study is to create a regression model over a selected time period to observe the typical relationship between

⁴⁸ Least News Trading Days were identified as dates with one or no Factiva headlines, earnings announcements, SEC filings, or analyst reports during the Class Period.

⁴⁹ An event study is a standard method to analyze the impact of information on market prices that has been adopted in academic research and a wide variety of other applications. See A. Craig MacKinlay, 1997, Event Studies in Economics and Finance, *Journal of Economic Literature* 13.

the price of the relevant security and market and industry indices. Through this regression model, an economist can model the predicted daily return of the relevant security, based on market and industry returns. By subtracting the predicted return from the actual return, an economist can calculate the "abnormal" return in the company's daily stock price movement, which represents the component of the daily stock price return that is not attributable to market-wide or industry-wide movements, but rather, is attributable to company-specific news. Finally, as part of an event study method, an economist tests whether the deviation from expected price movements (i.e., the abnormal return) is sufficiently large compared to the usual volatility in the Company stock price return such that simple random movement can be rejected as the cause.

- 46. Here, I performed an event study to evaluate whether SCANA's Common Stock responded to information disclosed in the Company's earnings announcements. To conduct the event study, I deployed the methodologies described above that are well-established in academic literature and routinely applied and accepted in the context of securities fraud litigation.
- 47. In an effort to isolate the impact of Company-specific news on SCANA's stock price during the Class Period, I performed regression analyses to measure the relationship between SCANA's stock price returns and: (1) changes in market-wide factors that would be expected to impact all stocks; and (2) changes in industry-wide factors that would be expected to impact stocks in SCANA's industry. By modeling how SCANA's stock price returns moved relative to an overall market index and an industry index, I could also measure its response to Company-specific news.
- 48. For each trading day analyzed, I constructed a regression model using data from the prior 120 trading days (approximately six months). It is common practice to employ a 120-

day Estimation Window. ⁵⁰ To study the relationship between SCANA's stock price returns and overall market factors, I used the S&P 500 Total Return Index (the "Market Index"). The Market Index is commonly used by economists as a representation of the overall market. To study the relationship between SCANA's stock price returns and changes in industry-wide factors that would be expected to impact all stocks in SCANA's particular industry, I constructed an industry index (the "Industry Index") made up of members of the S&P 500 Utilities Index, which SCANA compared its performance to in its DEF 14A SEC filings for the years ending during the Class Period. ⁵¹

49. I established the relationship between the daily return of the Company stock, the daily return on the Market Index, and the daily return on the Industry Index over the Estimation Window. 52 As shown in **Exhibit 4**, the event study model revealed a generally positive relation between the Company's daily returns and those of the overall stock market and industry. In other words, movements of the Market Index and Industry Index help explain movements in SCANA's stock price. This allowed me to predict the expected daily return of the Company on a date, once

⁵⁰ See, e.g., Mark L. Mitchell and Jeffry M. Netter, 1994, The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission, *The Business Lawyer* 49, at 568 ("The market model is estimated with regression analysis. The estimation period for this market model equation typically ranges from 100 to 300 trading days preceding the event under study."); A. Craig MacKinlay, 1997, Event Studies in Economics and Finance, *Journal of Economic Literature* 35, at 15 ("Given the selection of a normal performance model, the estimation window needs to be defined. The most common choice, when feasible, is using the period prior to the event window for the estimation window. For example, in an event study using daily data and the market model, the market model parameters could be estimated over the 120 days prior to the event. Generally the event period itself is not included in the estimation period to prevent the event from influencing the normal performance model parameter estimates.")

⁵¹ The S&P 500 Utilities Index included 28 constituents during this time period. Since SCANA was a member of the S&P 500 Utilities Index during the Class Period, I created a market capitalization-weighted Industry Index of the S&P 500 Utilities Index constituents other than SCANA. The Industry Index returns are net of the S&P 500 Total Return Index returns.

⁵² My use of this estimation model accounts for the relationship between the Company, market, and industry daily returns. This method has been accepted by academics in peer-reviewed literature. *See* A. Craig MacKinlay, 1997, Event Studies in Economics and Finance, *Journal of Economic Literature* 35, at 15 ("For example, in an event study using daily data and the market model, the market model parameters could be estimated over the 120 days prior to the event."); *see also* Phillip A. Braun, Daniel B. Nelson and Alain M. Sunier, 1995, Good News, Bad News, Volatility, and Betas, *Journal of Finance* 50, at 1597.

I controlled for that day's market and industry returns. I then subtracted the predicted return from the actual return to get the "abnormal" return, which represented the component of the return that is not attributable to market-wide or industry-wide movements.

- 50. Finally, I calculated the statistical significance of the abnormal return by comparing it to the usual volatility in the Company stock price return. An important statistic from a regression analysis is the standard deviation of the errors, which measures the degree of imprecision in the predictions from my regression model. In other words, the standard deviation of errors provides a metric for how much "randomness" remains in the price movement of SCANA's Common Stock, after controlling for the Market Index and the Industry Index.

 Exhibit 5 plots the standard deviation of the regression errors, also known as Root Mean Squared Error, over the Class Period. My rolling regression event study adjusts for changing volatility in SCANA's Common Stock over time.
- 51. To test for statistical significance, I calculated the t-statistic, which is the test that economists use to determine whether randomness can be rejected as the explanation for an abnormal price movement. The t-statistic measures the number of standard deviations between the actual observation and the predicted movement. It is calculated by dividing the abnormal return by the standard deviation of the errors. Probability theory suggests that under the standard assumption that abnormal returns will be normally distributed with a mean of zero in the absence of new value-relevant company-specific news, based purely on randomness, using a 95% confidence level and a sufficiently large sample size, an abnormal return should have a t-statistic greater than 1.96 (or less than -1.96) approximately 5% of the time in the absence of new

company-specific information.⁵³ In other words, there is a 95% chance that, barring some non-random explanation, the actual observed return will fall within 1.96 standard deviations of the predicted return.

- 52. **Exhibit 6** reports the event study results of SCANA's seven earnings announcement dates during the Class Period. The columns list the dates, description of the earnings release, closing stock price, raw return, abnormal return from my event study, abnormal dollar change in stock price from my event study, the t-statistic, and the p-value for interpretation of statistical significance of the stock movement. Overall, three SCANA earnings announcements caused stock price movements that were statistically significant at the 95% level. I compare this rate with that on the Least News Trading Days in the following exhibit.
- 53. **Exhibit 7** summarizes the statistical comparison of SCANA's stock returns and trading volume following the seven earnings announcements versus these metrics as measured on the Least News Trading Days. The Least News Trading Days include 41 observations, meaning that the tests of statistical significance are based on 48 observations. As shown in the exhibit, 42.9% of the earnings announcements caused stock movements that were statistically significant at the 95% level. This compares to 0.0% of the Least News Trading Dates with statistically significant stock price movements. This difference is itself significant at the 99% level. This provides strong evidence of a cause-and-effect relationship between information and SCANA Common Stock price movements.
- 54. This exhibit also shows that the average of the absolute value of stock price movements following SCANA's earnings announcements was 1.0%. This compares to an

⁵³ David I. Tabak and Frederick C. Dunbar, *Materiality and Magnitude: Event Studies in the Courtroom, Litigation Services Handbook, The Role of the Financial Expert, Ch. 19*, (3rd ed. 2001). The financial economics literature often identifies the 90% threshold as a relevant boundary for significance as well.

average of only 0.3% on the Least News Trading Days. This difference is statistically significant at the 99% level. This further supports a finding of a strong cause-and-effect relationship between information and SCANA Common Stock price movements.

- 55. Finally, this exhibit reports an average daily trading volume of 1.4 million shares for SCANA Common Stock following earnings announcements. This compares to an average daily trading volume of 0.7 million shares on the Least News Trading Days. The difference between these two levels is statistically significant at the 99% level, providing further evidence of the cause-and-effect relationship between information and SCANA's Common Stock price movements.
- 56. In summary, relative to other trading days, SCANA's earnings announcements caused a significantly greater proportion of statistically significant stock price movements, absolute levels of price changes, and increases in trading volume. This finding establishes a clear cause-and-effect relationship between new company-specific information and SCANA Common Stock price movements. As a result, this price impact analysis supports the conclusion that SCANA's Common Stock traded in an efficient market during the Class Period.

F. Additional Factor 1: Market Capitalization

57. I have also considered several additional factors beyond the five *Cammer* factors, the first of which is the total value of stock outstanding, or market capitalization. The *Cammer* court acknowledged this factor as indicative of market efficiency, holding that "it is the number of shares traded and value of shares outstanding that involve the facts which imply efficiency." Moreover, the *Krogman* court stated "[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there

⁵⁴ Cammer, 711 F. Supp. at 1287.

is a greater incentive for stock purchasers to invest in more highly capitalized corporations."⁵⁵
As stated previously, the MRK Study found that firms lacking analyst coverage had other indicators of trading in less developed and efficient markets, including smaller market capitalizations. The median market capitalization of the MRK Sample firms was \$27.91 million. ⁵⁶ By contrast, the MRK Covered firms had a median market capitalization of \$243.97 million. ⁵⁷ This study supports the view that firms with larger market capitalizations tend to trade in more efficient markets.

58. **Exhibit 8** reports SCANA's market capitalization throughout the Class Period. This market capitalization exceeded \$5.89 billion throughout this time frame, and averaged \$9.4 billion over the Class Period. This greatly exceeds the median market capitalization value for the MRK Covered firms. 58 Moreover, SCANA's number of shares outstanding ranged from 142.62 million shares to 142.92 million shares during the Class Period. 59 As a result, SCANA's market capitalization supports the conclusion that the Common Stock traded in an efficient market during the Class Period.

G. Additional Factor 2: Bid-Ask Spread

59. The *Krogman* court considered the bid-ask spread as another factor that can indicate market efficiency: "[a] large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade." The bid-ask spread is the difference between the price at which an investor could purchase a stock (the ask) and the price at which an investor could sell the stock (the bid). This spread can be expressed as the difference

26

⁵⁵ Krogman, 202 F.R.D. at 478.

⁵⁶ MRK Study at 678 (Table 3).

⁵⁷ MRK Study at 678 (Table 3).

⁵⁸ SCANA's market capitalization also significantly exceeds these levels on an inflation-adjusted basis.

⁵⁹ Shares outstanding obtained from SCANA SEC filings during the Class Period.

⁶⁰ Krogman, 202 F.R.D. at 478.

between these prices in their quoted currency, or as a percentage – for example relative to the bid-ask midpoint. A narrow bid-ask spread indicates lower transaction costs to trade in a given stock and is indicative of a more informationally-efficient market. A wider bid-ask spread will cause investors to pay more money to buy and sell a given stock, and these higher transaction costs can discourage trading and price discovery, thus indicating a less liquid and less efficient market.

- 60. I analyzed the bid-ask spread of SCANA's Common Stock during the Class Period. **Exhibit 9** reports the monthly average bid-ask spread as a percentage of the bid-ask midpoint over this time period. This spread fluctuated between 0.010% and 0.035% from March 2016 through November 2017. 62
- 61. By way of comparison, the MRK Study found that the MRK Sample firms had a median bid-ask spread of 4.55% while the MRK Covered firms had a median bid-ask spread of 1.69%. 63 SCANA's bid-ask spread was significantly smaller than both of these values, indicating that investors could trade SCANA's Common Stock at very low relative cost. As a result, SCANA's bid-ask spread supports the conclusion that the Common Stock traded in an efficient market during the Class Period.

⁶¹ The bid-ask spread was calculated by taking the average of the difference between the ask price and the bid price during trading hours on the primary exchange of the security, the NYSE, weighted by the amount of time each quote prevailed in the market. I calculated the weighted average quote, with the weight being the number of seconds between a given quote and the next quote that was reported. The bid-ask spread is calculated as the difference between the ask price and bid price divided by the midpoint of the bid-ask spread. I calculated the National Best Bid and Offer using the data filtering procedures described in Roger D. Huang and Hans R. Stoll, 1996, Dealer Versus Auction Markets: A Paired Comparison of Execution Costs on NASDAQ and the NYSE, *Journal of Financial Economics* 41.

⁶² I also examined the dates from February 2016 and December 2017 that were part of the Class Period, and report them in Exhibit 9. The Class Period dates from February 2016 had an average bid-ask spread of 0.04%, and the Class Period dates from December 2017 had an average bid-ask spread of 0.01%. I noted, however, that neither of these figures was computed using a full month of data. Quote Data for SCANA's Common Stock was obtained from the TICK database. *See* https://tickapi.tickdata.com/.

⁶³ MRK Study at 678 (Table 3).

H. Additional Factor 3: Public Float

- 62. The *Krogman* court also considered the public float of a company in weighing market efficiency. 64 The public float represents the number of shares outstanding that are available for trading and not held by corporate insiders. Even if a company has a large market capitalization, if the majority of the equity is held by its CEO and/or other insiders, then investors may be unable to trade the stock without exerting undue pricing pressure resulting from a lack of liquidity and supply/demand imbalances.
- 63. **Exhibit 10** reports the shares outstanding, public float, and shares held by insiders for SCANA Common Stock during the Class Period. As shown in the exhibit, SCANA insiders held less than 10% of the Common Stock throughout the Class Period (average = 8%). Thus, approximately 92% of SCANA's common shares were held by institutions and other outside investors. This large degree of public float for SCANA's Common Stock supports the conclusion that it traded in an efficient market during the Class Period.

I. Additional Factor 4: Institutional Ownership

- 64. Institutional investors are pension funds, endowments, mutual funds, investment banks, hedge funds, and other sophisticated investors who have significant resources to allocate to investing decisions. These investors can improve market efficiency by digesting new public information and making investment decisions over large block holdings of shares, thus causing the new information to be quickly impounded into stock prices. Thus, the presence of institutional shareholders can be an indicator of market efficiency.
- 65. I also report the total institutional ownership of SCANA Common Stock in **Exhibit 10**, which shows that at least 991 institutions held the stock at some point during the

⁶⁴ "In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders." *Krogman*, 202 F.R.D. at 478.

Class Period. By comparison, the MRK Study found that the MRK Sample firms had a median of only nine institutional investors while the MRK Covered firms had a median of 40 institutional investors. 65 SCANA's institutional ownership base greatly exceeds both of these levels. Thus, the significant institutional ownership base for SCANA Common Stock supports the conclusion that the Common Stock traded in an efficient market during the Class Period.

J. Additional Factor 5: Autocorrelation

66. Autocorrelation refers to an anomaly by which stock returns over a given time period are able to predict future returns. The interval over which autocorrelation is examined tends to be on a daily basis. Thus, if the stock return today predicts tomorrow's stock return with a statistically significant correlation, the returns are said to be autocorrelated. A positive autocorrelation could give rise to "momentum" trading whereby an investor would purchase (sell or short sell) stock when returns are positive (negative) in order to generate profits as the returns continue over subsequent trading days. A negative autocorrelation could give rise to "reversal" trading whereby an investor would sell or short sell (purchase) stock when returns are positive (negative) in order to capture profits when the returns reverse. Autocorrelation may occur occasionally due to random patterns in aggregate stock return data or due to consecutive news days with different types of new information being publicly released. However, if statistically significant autocorrelation in stock returns persists over a sufficient time period such as several quarters, and is large enough in magnitude that a trader could earn riskless profits after trading costs, this would imply market inefficiency because publicly-available information about prior stock price movements would not be fully reflected in current stock prices.

⁶⁵ MRK Study at 678 (Table 3).

- 67. I use an established methodology, *i.e.*, a regression analysis, to test for autocorrelation in SCANA's Common Stock returns. ⁶⁶ This evaluates whether, from a statistical perspective, the stock return on a given day can predict the stock return on the following trading day. ⁶⁷ After performing the regression to test for this pattern over the sample of trading days throughout the Class Period, if the regression produces a statistically significant result, then it becomes necessary to explore whether this pattern is sufficiently large in magnitude, consistent in direction, and persistent over time such that a trading arbitrage opportunity exists. If, however, the regression does not indicate a statistically significant pattern in the stock returns, then no evidence exists of an autocorrelation anomaly.
- 68. **Exhibit 11** presents the results from the autocorrelation test for SCANA's Common Stock during the Class Period. The autocorrelation coefficient over the full Class Period is not statistically significant. Moreover, the quarterly autocorrelation coefficients alternate between negative and positive throughout the Class Period, indicating no consistent predictability in the Company's daily stock returns over time. Thus, I find no evidence of persistent autocorrelation in SCANA's Common Stock returns. This finding supports the conclusion that SCANA's Common Stock traded in an efficient market during the Class Period.

K. Additional Factor 6: Options Trading

69. Academic studies have shown that options written on company stock help to improve market depth and liquidity, investor interest, and overall market efficiency, as indicated

⁶⁶ I evaluate abnormal returns, the calculation of which was described in the *Cammer* factor five analysis section of this report (IV.E).

⁶⁷ Doron Avramov, Tarun Chordia, and Amit Goyal, 2006, Liquidity and Autocorrelations in Individual Stock Returns, *Journal of Finance* 61, at 2367-68; Michael C. Jensen, 1978, Some Anomalous Evidence Regarding Market Efficiency, *Journal of Financial Economics* 6, at 95-101.

⁶⁸ I excluded one outlier daily return on July 28, 2017 (an alleged corrective disclosure). This date generated an artificial autocorrelation result due to consecutive days of news releases, but would not be indicative of riskless arbitrage driven by market inefficiency.

by increases in trading volume, narrower bid-ask spreads, and improvements in transaction sizes and frequencies. ⁶⁹ Thus, options trading on a company's stock can improve price discovery and support a finding of market efficiency, relative to a company without any options trading. According to iVolatility, SCANA Common Stock had 73,619 call option contracts and 76,964 put option contracts traded during the Class Period. This significant level of options trading supports the conclusion that SCANA's Common Stock traded in an efficient market during the Class Period.

V. Ability to Calculate Damages on a Class-Wide Basis

70. I have been asked by Counsel to evaluate whether per-share damages can be assessed for all Class members under §10(b) of the Exchange Act based upon a methodology common to all class members and consistent with Lead Plaintiff's theory of liability. The "out-of-pocket" method of calculating damages represents a standard and well-accepted methodology under Section 10(b) of the Exchange Act. This approach calculates damages formulaically as the artificial inflation in the share price at the time of purchase minus the artificial inflation in the share price at the time of sale. If shares are not sold prior to the full revelation of the fraud, then the difference is relative to a 90-day lookback period under the Securities Litigation Reform Act of 1995 ("PSLRA"). This limit on damages can also be applied class-wide. I understand that this out-of-pocket methodology has been widely accepted for use across 10(b) matters.

-

⁶⁹ Raman Kumar, Atulya Sarin, and Kuldeep Shastri, 1998, The Impact of Options Trading on the Market Quality of the Underlying Security: An Empirical Analysis, *Journal of Finance* 53. See also: Stephen A. Ross, 1976, Options and Efficiency, *Quarterly Journal of Economics* 90.

⁷⁰ The PSLRA states: "...in any private action arising under this title in which the plaintiff seeks to establish damages by reference to the market price of a security, the award of damages to the plaintiff shall not exceed the difference between the purchase or sale price paid or received, as appropriate, by the plaintiff for the subject security and the mean trading price of that security during the 90-day period beginning on the date on which the information correcting the misstatement or omission that is the basis for the action is disseminated to the market." See, Private Securities Litigation Reform Act of 1995, dated December 22, 1995, 737, 748-49.

- 71. The claims process produces information necessary for the calculation of damages for each Class member, including the purchase and sale information for the security. This information is available from brokerage statements and other documentation of securities transactions. Artificial inflation per share is quantified for each day of the Class period and then damages are calculated using the formula described above. As a result, the methodology for calculating damages in Section 10(b) matters such as this is well-established and formulaic across all Class members.
- 72. The quantification of artificial inflation per share is based upon a detailed loss causation analysis. I have not been asked to perform a loss causation analysis at this time, and I understand that such analysis often incorporates information produced during discovery.

 Nonetheless, the method employed to calculate artificial inflation can be applied class-wide.
- 73. Event studies are widely-employed to calculate artificial inflation. Event studies measure stock price reactions to corrective disclosures which revealed the relevant truth that was concealed by alleged material omissions and/or misrepresentations. 71 To the extent that reliable evidence is introduced to show that a material portion of the difference in the artificial inflation between the purchase and sale of the securities may be attributed to non-fraud related factors, the impact of such "confounding information" on the price of SCANA securities can be determined on a common, class-wide basis using various accepted methodologies. The value of any confounding information can then be subtracted from the price impact of corrective disclosures in calculating inflation. This process may rely upon additional information learned during the discovery process, and will be based on the specific set of facts and circumstances in a given case.

⁷¹ In this report I conducted an event study to assist with the evaluation of market efficiency. My event study in this report was not intended to quantify artificial inflation.

- 74. A loss causation analysis must also document how artificial inflation per share evolved throughout the Class Period. This determination depends on the specific set of facts and circumstances for a given case and also could incorporate information produced through discovery. One frequent method for modeling the evolution of inflation is to assume "constant dollar inflation." This assumes that per share inflation equaled a constant dollar amount above the correct share price over the Class Period. Alternatively, one can measure "constant percentage inflation," which assumes that each share price was inflated by a constant percentage amount above the correct stock price over the Class Period. In other instances, artificial inflation may have varied on a daily basis and could evolve throughout the Class Period based on the timing of specific information or statements. In any of these approaches, the calculation of artificial inflation is based on the specific set of facts and circumstances in a given case and can involve valuation techniques, event studies, published academic research studies, analyst research, or other case-specific documents. All of these loss causation calculations can be performed on a class-wide basis and are not dependent upon individual class member identities or circumstances.
- 75. To summarize, I have not been asked to calculate damages in this matter. Such loss causation analysis would depend on information produced in discovery and development of the case record. Based on my experience and qualifications and my understanding of the nature of claims in this matter, I conclude that damages in this case can, however, be calculated using a standard and well-established methodology, and can be applied on a class-wide basis.

VI. Conclusion

76. In conclusion, based on the market efficiency factors considered by courts and in academia, upon which I conducted my analyses, it is my opinion that SCANA's Common Stock

traded in an efficient market throughout the Class Period. Moreover, it is my opinion that damages in this matter can be calculated on a class-wide basis utilizing a common methodology.

77. I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on April 30, 2021

Matthew D. Cain

Appendix A

Matthew D. Cain, Ph.D.

April 2021

E-mail: mdcain@outlook.com
Mobile: 574-485-8065

SSRN

Education

Ph.D., Finance, August 2007 B.S., Finance, May 2001 Purdue University, West Lafayette, IN Grove City College, Grove City, PA

Professional and Academic Experience

Senior Fellow, Berkeley Center for Law and Business; Senior Visiting Scholar, Berkeley Law School, University of California, 2019-Present

Visiting Research Fellow, Harvard Law School Program on Corporate Governance, 2018-2019

Advisor to Commissioner Robert J. Jackson, Jr., U.S. Securities and Exchange Commission, 2018

Economic Fellow / Financial Economist, Office of Litigation Economics, Division of Economic and Risk Analysis, U.S. Securities and Exchange Commission, 2014-2018

Assistant Professor of Finance, Mendoza College of Business, University of Notre Dame, Notre Dame, IN, 2008-2014

Visiting Faculty, Krannert School of Management, Purdue University, West Lafayette, IN, 2007-2008

Analyst, Debt Capital Markets, National City Bank, Cleveland, OH, 2001-2003

Publications

Does *Revlon* Matter? An Empirical and Theoretical Study (with Sean J. Griffith, Robert J. Jackson, Jr., and Steven Davidoff Solomon), *California Law Review* 108, 1683-1731 (2020).

Intermediation in Private Equity: The Role of Placement Agents (with Stephen B. McKeon and Steven Davidoff Solomon), *Journal of Financial and Quantitative Analysis* 55, 1095-1116 (2020).

Mootness Fees (with Jill E. Fisch, Steven Davidoff Solomon, and Randall S. Thomas), *Vanderbilt Law Review* 72, 1777-1816 (2019).

The Myth of Morrison: Securities Fraud Litigation Against Foreign Issuers (with Robert Bartlett, Jill E. Fisch, and Steven Davidoff Solomon), *The Business Lawyer* 74, 967-1013 (2019).

The Shifting Tides of Merger Litigation (with Jill E. Fisch, Steven Davidoff Solomon, and Randall S. Thomas), *Vanderbilt Law Review* 71, 603-640 (2018).

- Do Takeover Laws Matter? Evidence from Five Decades of Hostile Takeovers (with Stephen B. McKeon and Steven Davidoff Solomon), *Journal of Financial Economics* 124, 464-485 (2017).
- CEO Personal Risk-Taking and Corporate Policies (with Stephen B. McKeon), *Journal of Financial and Quantitative Analysis* 51, 139-164 (2016).
- How Corporate Governance Is Made: The Case of the Golden Leash (with Jill E. Fisch, Sean J. Griffith, and Steven Davidoff Solomon), *University of Pennsylvania Law Review* 164, 649-702 (2016).
- A Great Game: The Dynamics of State Competition and Litigation (with Steven Davidoff Solomon), *Iowa Law Review* 100, 465-500 (2015).
- Broken Promises: Private Equity Bidding Behavior and the Value of Reputation (with Antonio J. Macias and Steven Davidoff Solomon), *Journal of Corporation Law* 40, 565-598 (2015).
- Information Production by Investment Banks: Evidence from Fairness Opinions (with David J. Denis), *Journal of Law and Economics* 56, 245-280 (2013).
- Delaware's Competitive Reach (with Steven Davidoff Solomon), *Journal of Empirical Legal Studies* 9, 92-128 (2012).
- Form Over Substance? Management Buy-outs and the Value of Corporate Process (with Steven Davidoff Solomon), *Delaware Journal of Corporate Law* 36, 1-54 (2011).

Earnouts: A Study of Financial Contracting in Acquisition Agreements (with David J. Denis and Diane K. Denis), *Journal of Accounting and Economics* 51, 151-170 (2011).

Presentations

Arizona State University College of Law, 2020 U.C. Berkeley School of Law, 2019; 2018 Vanderbilt University Law School, 2019 Berkeley Center for Law and Business, 2018 Cornerstone Research, 2018 Cornell University, 2016; 2015 Oxera, London, 2016

Institute for Law and Economics, University of Pennsylvania, 2015

U.C. Berkeley M&A Roundtable, New York, 2015

American Bar Association, Business Law, Private Equity M&A Subcommittee meeting, 2015

Virginia Commonwealth University, 2015

American Finance Association, annual meeting, 2015

Argentum Centre for Private Equity Symposium, Bergen, Norway, 2014

U.S. Securities and Exchange Commission, 2014

American Law and Economics Association, University of Chicago, 2014

The Brattle Group, 2013

U.S. Securities and Exchange Commission, 2013

Institute for Law and Economics, University of Pennsylvania, 2013

All Indiana Conference, 2013; 2010; 2009

American Law and Economics Association, Stanford Law School, 2012

George Washington University Law School, 2012

American Finance Association, annual meeting, 2012

Ohio State, 2011

Ohio University, 2011

Conference on Empirical Legal Studies, Yale Law School, 2010

Argentum Conference and Symposium on "Private Equity: The Road Ahead," Stockholm, Sweden, 2010

Purdue Alumni Conference, 2010

American Finance Association, annual meeting, 2008

Indiana University, 2008

Penn State, 2008

University of Arizona, 2008

University of Colorado, 2008

University of Florida, 2008

University of North Carolina at Chapel Hill, 2008

University of Notre Dame, 2008

University of Oregon, 2008

University of Pittsburgh, 2008

Virginia Tech, 2008

Financial Management Association, annual meeting, 2007

University of Georgia, 2007

University of Kentucky, 2007

Western Finance Association, annual meeting, 2006

<u>Journal Referee</u>: Review of Financial Studies, Journal of Financial and Quantitative Analysis, Journal of Corporate Finance, European Financial Management, Journal of Empirical Legal Studies, Financial Management, North American Journal of Economics and Finance, International Review of Law & Economics, Managerial and Decision Economics, Annals of Finance, Journal of Economics and Business

Teaching Experience

UC Berkeley School of Law

LAW 251.52: Economics of Corporate and Securities Litigation, Fall: 2020

University of Notre Dame, Mendoza College of Business

FIN 70400: Corporate Restructuring, Mergers & Acquisitions (MBA Elective), Fall: 2008-2013

FIN 40410: Mergers and Acquisitions, Fall: 2008-2013

Purdue University, Krannert School of Management

MGMT 412: Financial Markets and Institutions, Spring: 2006 & 2008

MGMT 610: Financial Management I (MBA Core), Fall: 2007

Expert Witness Experience

- Securities and Exchange Commission v. James Wallace Nall, III, et al., Case No. 2:19-cv-702-TFM-C (S.D. Al.). Report April 2021.
- Mark Stoyas and New England Teamsters & Trucking Industry Pension Fund, Plaintiffs, and Automotive Industries Pension Trust Fund, Lead Plaintiff, v. Toshiba Corporation, Case No. 2:15-cv-04194-DDP(JCx) (C.D. Ca.). Report February 2021.
- Plymouth County Retirement System, et al. v. Patterson Companies, Inc., et al., Case No. 0:18-cv-00871-MJD-HB (D. Mn.). Report January 2021. Deposition March 2021.
- In re Novo Nordisk Securities Litigation, Case No. 3:17-cv-00209-BRM-LHG (D. Nj.). Rebuttal Report December 2020. Deposition February 2021.
- In re Facebook, Inc. Securities Litigation, Case No. 5:18-cv-01725-EJD (N.D. Ca). Declaration October 2020.
- In re Qualcomm/Broadcom Merger Securities Litigation, Case No. 3:18-cv-01208-CAB-AHG (S.D. Ca.). Declaration May 2020.
- In re Banc of California Securities Litigation, Case No. 8:17-cv-00118-AG-DFM (C.D. Ca.). Report April 2019.
- Tharp v. Acacia Communications, Inc., Case No. 17-cv-11504 (D. Mass.). Declaration November 2018.
- Securities and Exchange Commission v. Avent, Case No. 1:16-cv-02459-WMR (N.D. Ga.). Report March 2017. Deposition May 2017. Jury Trial August 2019.
- In the Matter of Lawrence I. Balter d/b/a Oracle Investment Research, File No. 3-17614 (SEC Admin. Proc.). Report March 2017.
- Securities and Exchange Commission v. Huang, Case No. 2:15-cv-00269-MAK (E.D. Pa.). Report September 2015. Declaration October 2015. Jury Trial January 2016.
- Securities and Exchange Commission v. Alyasin, Case No. 4:15-cv-00566 (S.D. Tex.). Declaration March 2015.

Appendix B

Documents Considered

Court Documents:

• Consolidated Complaint, International Brotherhood of Electrical Workers Local 98 Pension Fund on Behalf of Itself and All Others Similarly Situated vs. Deloitte & Touche, LLP and Deloitte LLP, No. 3:19-cv-3304.

Court Decisions and Securities Law:

- *Basic Inc. v. Levinson*, 485 U.S. 224, 241-42 (1988).
- Bromberg & Lowenfels, 4 Securities Fraud and Commodities Fraud, § 8.6. (Aug. 1988).
- Cammer v. Bloom, 711 F. Supp. 1264 (D.N.J. 1989).
- Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 283-84 (2014).
- Hayes v. MagnaChip Semiconductor Corp., Case No. 14-cv-01160-JST (N.D.Ca. 2016)
- In re Countrywide Financial Corp. Securities Litigation, 273 F.R.D. 586, 614 (C.D.Ca. 2009)
- *In re HealthSouth Corp. Securities Litigation*, 257 F.R.D. 260, 281 (N.D.Al. 2009)
- Krogman v. Sterritt, 202 F.R.D. 467 (N.D. Tex. 2001).
- Private Securities Litigation Reform Act of 1995, dated December 22, 1995, 737, 748-49.
- Vinh Nguyen v. Radient Pharmaceuticals Corporation, 287 F.R.D. 563, 572-73 (C.D.Ca. 2012)

Academic Literature:

- Doron Avramov, Tarun Chordia, and Amit Goyal, 2006, Liquidity and Autocorrelations in Individual Stock Returns, *Journal of Finance* 61.
- Brad M. Barber, Paul A. Griffin, and Baruch Lev, 1994, The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency, *Journal of Corporate Law* 19.
- Phillip A. Braun, Daniel B. Nelson and Alain M. Sunier, 1995, Good News, Bad News, Volatility, and Betas, *Journal of Finance* 50.
- Eugene F. Fama, 1998, Market Efficiency, Long-term Returns, and Behavioral Finance, *Journal of Financial Economics* 49.
- Kewei Hou, Chen Xue, and Lu Zhang, 2020, Replicating Anomalies, *Review of Financial Studies* 33.
- Roger D. Huang and Hans R. Stoll, 1996, Dealer Versus Auction Markets: A Paired Comparison of Execution Costs on NASDAQ and the NYSE, *Journal of Financial Economics* 41.
- Michael C. Jensen, 1978, Some Anomalous Evidence Regarding Market Efficiency, *Journal of Financial Economics* 6.
- Raman Kumar, Atulya Sarin, and Kuldeep Shastri, 1998, The Impact of Options Trading on the Market Quality of the Underlying Security: An Empirical Analysis, *Journal of Finance* 53.

- Charles M.C. Lee and Eric C. So, 2017, Uncovering Expected Returns: Information in Analyst Coverage Proxies, *Journal of Financial Economics* 124.
- A. Craig MacKinlay, 1997, Event Studies in Economics and Finance, *Journal of Economic Literature* 13.
- Mark L. Mitchell and Jeffry M. Netter, 1994, The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission, *The Business Lawyer* 49.
- Simona Mola, P. Raghavendra Rau, and Ajay Khorana, 2013, Is There Life After the Complete Loss of Analyst Coverage?, *Accounting Review* 88.
- Stephen A. Ross, 1976, Options and Efficiency, *Quarterly Journal of Economics* 90.
- David I. Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," LITIGATION SERVICES HANDBOOK, THE ROLE OF THE FINANCIAL EXPERT, (3rd ed. 2001).
- Randall S. Thomas and James F. Cotter, 2000, Measuring Securities Market Efficiency in the Regulatory Setting, *Law and Contemporary Problems* 63.

Data Sources:

- Factiva News
- Investext Analyst Reports
- iVolatility Historical Options data
- SEC Edgar Online
- S&P Capital IQ Historical Stock Data
- SCANA Press Releases
- TICK Data for Stock Quotes
- Bloomberg Terminal

Other:

- https://www.investor.gov/introduction-investing/investing-basics/glossary/market-makers.
- https://www.sec.gov/files/forms-3.pdf.
- https://www.nyse.com/market-model
- https://www.sec.gov/Archives/edgar/data/754737/000075473716000125/0000754737-16-000125-index.htm
- https://www.sec.gov/Archives/edgar/data/754737/000075473715000062/0000754737-15-000062-index.htm
- https://www.sec.gov/Archives/edgar/data/754737/000075473718000124/0000754737-18-000124-index.htm

Exhibit 1

Common Stock Price and Volume 2/26/2016 - 12/31/2017

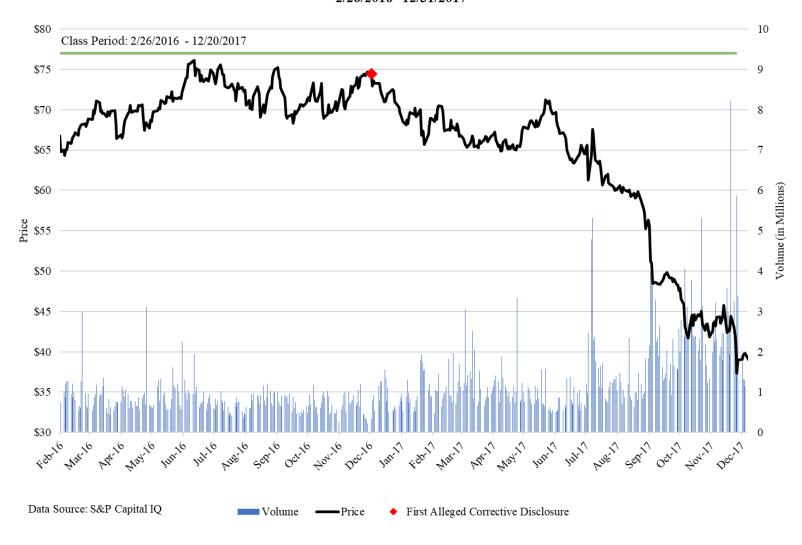
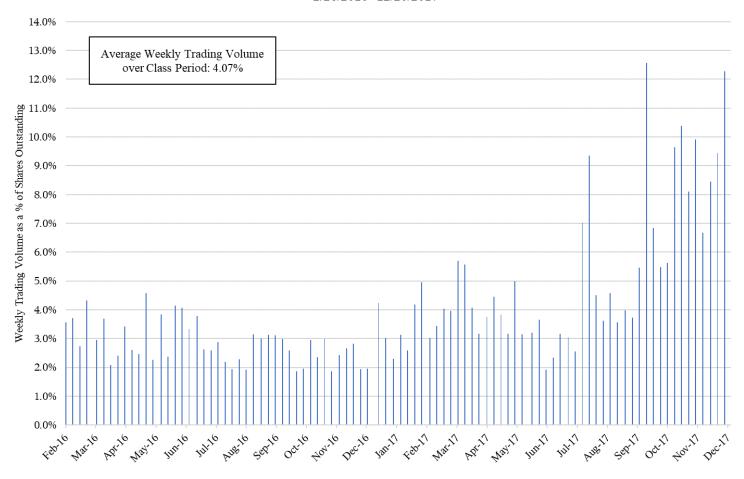


Exhibit 2

Average Weekly Trading Volume 2/26/2016 - 12/20/2017



Data sources: S&P Capital IQ and SEC Filings.

Exhibit 3

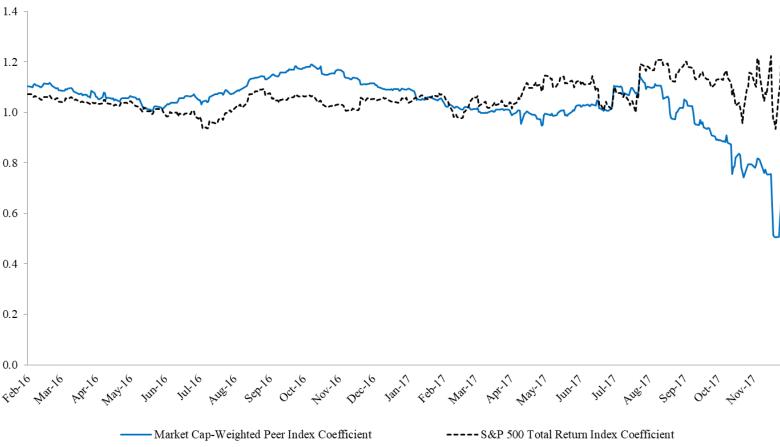
Analyst Coverage Class Period: 2/26/2016 - 12/20/2017

#	Analysts	Reports Published
1		
1	Morningstar	49
2	Wells Fargo Securities, LLC	29
3	Minkabu	16
4	CFRA Research	15
5	Gabelli & Company	14
6	UBS Research	13
7	Guggenheim Securities LLC	12
8	BuySellSignals Research	9
9	Morgan Stanley	9
10	The Williams Capital Group	9
11	Barclays	5
12	Macquarie Research	5
13	theScreener	1
	Total	186

Data Source: Investext.

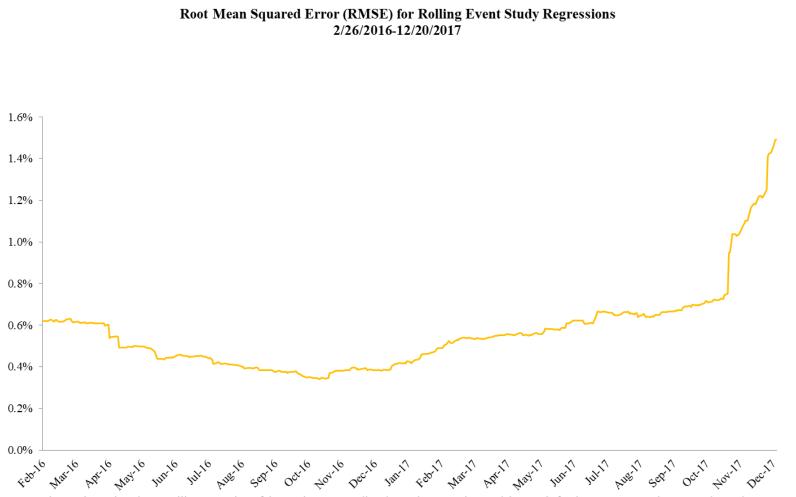
Exhibit 4

Coefficients from Rolling Event Study Regressions 2/26/2016-12/20/2017



Note: The results are based on a rolling regression of the previous 120 trading days. The regression model controls for the S&P 500 Total Return Index and a Market Capitalization-Weighted Peer Index. The Peer Index consists of the members of the S&P 500 Utilities Index during the Class Period; SCANA compares its stock performance to the S&P 500 Utilities Index in the Company's DEF 14A SEC filings for the years ending during the Class Period. Returns of the Peer Index are net of the S&P 500 Total Return Index. Earnings announcement dates, the alleged Corrective Disclosures, and two outlier dates (7/31/2017, SCANA ceases construction and will file plan of abandonment of the nuclear project; 8/1/2017, SCANA executives hold briefing with SC Public Service Commission on loss recovery) were excluded from estimation. Data from S&P Capital IQ.

Exhibit 5



Note: The results are based on a rolling regression of the previous 120 trading days. The regression model controls for the S&P 500 Total Return Index and a Market Capitalization-Weighted Peer Index. The Peer Index consists of the members of the S&P 500 Utilities Index during the Class Period; SCANA compares its stock performance to the S&P 500 Utilities Index in the Company's DEF 14A SEC filings for the years ending during the Class Period. Returns of the Peer Index are net of the S&P 500 Total Return Index. Earnings announcement dates, the alleged Corrective Disclosures, and two outlier dates (7/31/2017, SCANA ceases construction and will file plan of abandonment of the nuclear project; 8/1/2017, SCANA executives hold briefing with SC Public Service Commission on loss recovery) were excluded from estimation. Data from S&P Capital IQ.

Event Study Analysis of SCANA Earnings Announcements During the Class Period

Date	Market Date	Event	Price	Raw Return	Abn. Return	Abn. Dollar	T-Stat	P-Value
4/28/2016	4/28/2016	FY 2016 Q1 Earnings Source: PR Newswire	\$67.81	1.12%	1.15%	\$0.77	2.11	0.04
7/28/2016	7/28/2016	FY 2016 Q2 Earnings Source: PR Newswire	\$73.94	1.01%	0.67%	\$0.49	1.54	0.13
10/27/2016	10/27/2016	FY 2016 Q3 Earnings Source: PR Newswire	\$71.13	-0.49%	0.06%	\$0.04	0.18	0.86
2/16/2017	2/16/2017	FY 2016 and Q4 Earnings Source: PR Newswire	\$67.32	-0.22%	-1.34%	-\$0.90	-2.75	0.01
4/27/2017	4/27/2017	FY 2017 Q1 Earnings Source: PR Newswire	\$67.24	0.42%	0.12%	\$0.08	0.22	0.83
8/3/2017	8/3/2017	FY 2017 Q2 Earnings Source: PR Newswire	\$65.34	-2.70%	-3.13%	-\$2.10	-4.74	0.00
10/26/2017	10/26/2017	FY 2017 Q3 Earnings Source: PR Newswire	\$47.83	0.55%	0.67%	\$0.32	0.93	0.36

Data sources: S&P Capital IQ and Factiva.

Exhibit 6

Notes: The results are based on a rolling regression of the previous 120 trading days as described in Exhibits 4 and 5.

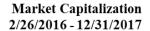
Exhibit 7

Statistical Comparison of SCANA Returns and Volume on Earnings Announcement vs. Least News Trading Days

	Earnings Announcements	Least News Trading Days	P-Value for Differences	Significance Level
N	7	41		
# of Significant Days at 95% Level	3	0		
% of Significant Days at 95% Level	42.9%	0.0%	0.00	>99%
Average Absolute Abnormal Return	1.0%	0.3%	0.00	>99%
Average Volume (Millions)	1.4	0.7	0.00	>99%

Notes: The seven earnings announcement dates and market trading days are listed in the previous exhibit. Least News Trading Days were identified as dates with one or no Factiva headlines, earnings announcements, SEC filings, or analyst reports during the Class Period. Data from S&P Capital IQ, SEC EDGAR, Factiva, and Investext.

Exhibit 8



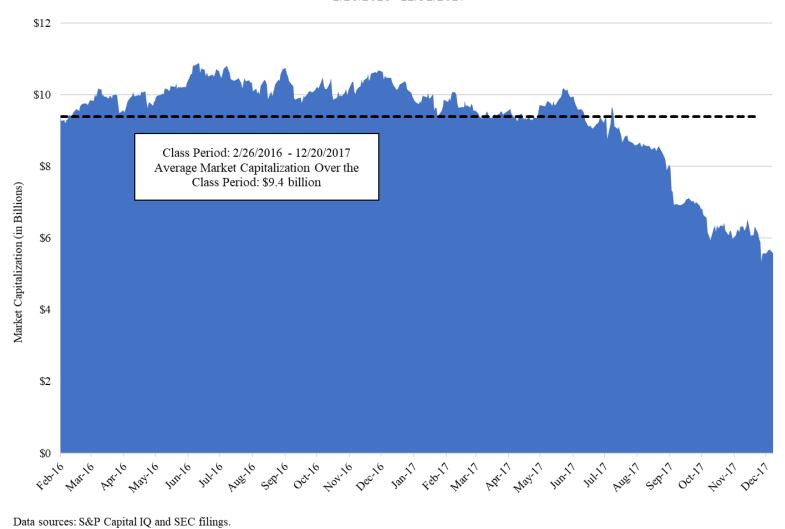
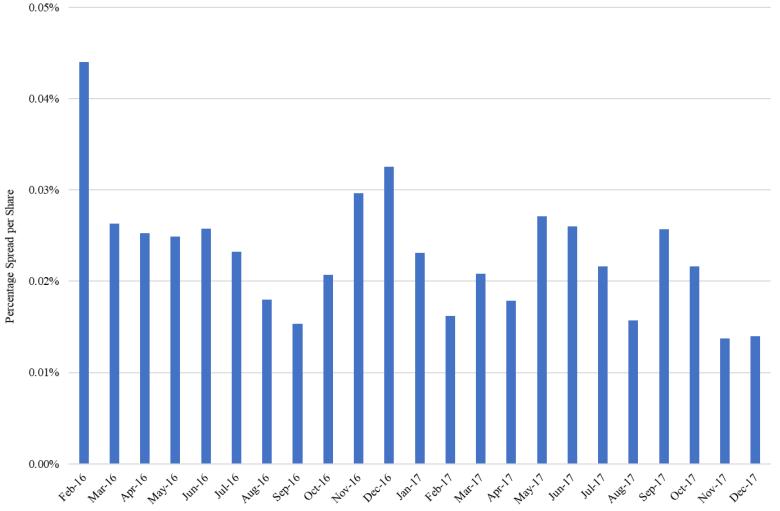


Exhibit 9

Bid-Ask Spread 2/26/2016 - 12/20/2017



Data Source: TICK Data

Notes: February 2016 and December 2017 dates analyzed are limited to the Class Period.

Exhibit 10

SCANA Common Stock Public Float, Insider Holdings, and Institutional Ownership

Date	Shares Outstanding (in 000s)	Total Institutions Owning Stock	Insider Holdings (in 000s)	Short Interest (in 000s)	Public Float (in 000s)	Insider Holdings % of Shares Outstanding	Total Institutional Ownership (in 000s)	Institutional Ownership % of Shares Outstanding	Institutional Ownership % of Public Float
[1]	[2]	[3]	[4]	[5]	[6] = [2] + [5] - [4]	[7] = [4] / [2]	[8]	[9] = [8] / [2]	[10] = [8] / [6]
3/31/2016	142,917	617	12,873	5,741	135,785	9%	94,538	66%	70%
6/30/2016	142,917	640	12,901	5,281	135,297	9%	95,150	67%	70%
9/30/2016	142,917	624	12,872	4,839	134,884	9%	94,818	66%	70%
12/31/2016	142,917	647	11,606	5,069	136,380	8%	95,160	67%	70%
3/31/2017	142,917	643	11,618	5,306	136,606	8%	99,335	70%	73%
6/30/2017	142,917	638	11,572	5,462	136,807	8%	98,186	69%	72%
9/30/2017	142,917	622	11,575	4,139	135,481	8%	97,920	69%	72%
12/31/2017	142,616	605	7,285	5,150	140,481	5%	96,959	68%	69%
Total Institutions o	ver Class Period:	991			Average:	8%		68%	71%

Data Sources: S&P Capital IQ and SEC Filings.

Exhibit 11

SCANA Common Stock
Test for Autocorrelation During the Class Period

Quarter	Coefficient on Previous Day's Abnormal Return	T-Statistic	
Q1 2016	-0.37	-1.90	0.07
Q2 2016	-0.03	-0.24	0.81
Q3 2016	0.14	1.13	0.26
Q4 2016	0.08	0.61	0.54
Q1 2017	-0.09	-0.72	0.47
Q2 2017	-0.04	-0.29	0.77
Q3 2017	0.25	2.04	0.05
Q4 2017	-0.21	-1.68	0.10
Class Period	-0.03	-0.73	0.47

Data Source: S&P Capital IQ

Notes: The autocorrelation testing period is February 26, 2016 through December 20, 2017. I performed a regression each quarter and over the full Class Period with event study daily abnormal returns as the dependent variable and the event study daily abnormal returns lagged by one trading day as the independent variable. One outlier daily return on July 28, 2017 was removed from the analysis (an alleged Corrective Disclosure date).